

#### **Environmental Committee**

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# **Iowa To Join US Climate Alliance**

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## **Position Statement**

The Iowa Youth Congress supports legislation that mandates that Iowa joins the US Climate Alliance to encourage environmental protection policies in Iowa.

## **Position**

The Iowa Youth Congress should support the passage of a bill that makes the state of Iowa an active and participating member of the United States Climate Alliance. In this position, Iowa would be required to follow strict rules and regulations on limiting carbon dioxide emissions, promoting the removal of waste, and improving other issues that could potentially harm local, national, and global ecosystems. The bill would also ensure that Iowa cannot depart from the USCA until the alliance itself does not see a need for the state's involvement.

# **Current Situation**

A global climate crisis is severely affecting important ecosystems in Iowa and around the planet. Because Iowa is a state in which farming is a significant economic contributor, it is of the utmost importance to protect the environment from harmful entities. The issue of climate change in Iowa does not only affect farmers directly, it affects all citizens, whether it be economically or through their physical health. From the water people drink to the food on people's tables, an important aspect of every Iowan's life can be negatively impacted by climate change and a lack of care for the environment.

In 2018, Iowa ranked 1st in the US for corn production, 2nd in soybean production, and 8th for oat production. 31% of the nation's hogs are located in Iowa, ranking 1st in the nation for hog production. Iowa also ranks 1st for egg production and 8th for cattle production (National Center for Agricultural). From 2017 to 2018, Iowa's corn for silage yield went down 20%, corn for grain production dropped 4%, soybean production decreased fractionally, hay production was down 8%, alfalfa production was down 9%, and other hay production was down 6% (United States Department of Agriculture). Although Iowa is the leading producer of corn in the United States, the yield of corn may be negatively affected by climate change. Other Iowa crops and livestock could also continue to be negatively impacted through climate change if effective action is not taken.

According to the 2019 Iowa Climate Statement, "July 2019 was the hottest month ever in 140 years of record-keeping, according to the World Meteorological Association... Only by dramatic reductions in greenhouse gas emissions within the next 10 to 15 years will these effects be lessened." The climate in Iowa is predicted to continue warming due to Carbon Dioxide emissions and "by mid-century (2036-2065) the

5-day maximum temperatures are projected to be about 98°F, or 6°F hotter" (2019 Iowa Climate Statement). Research shows that in the upper Midwest, very heavy precipitation has increased by 37% between 1958-2012, which is expected to increase throughout the 21st century if preventative measures are not taken; however, due to the warming climate, the amount of snow is predicted to decline while the amount of rain in Iowa is expected to continually rise (Bradley R., A. Karmalkar, & K. Woods). Since climate change adversely affects citizens individually, the state of Iowa, and the nation, it is crucial to take action as to not enhance the already detrimental side-effects that climate change has caused.

#### Rationale

People and animals are directly affected by heat and heat-related illnesses; according to the 2019 Iowa Climate Statement, "people who work outdoors, such as building and road construction workers, military personnel and agricultural workers, are particularly at risk of heat-related illnesses such as heat exhaustion, heat cramps or in severe cases, heat stroke." The current greenhouse gas emissions growth rate is projected to raise the annual number of days above 90°F in Iowa from 23 to 67 by mid-century, and heat stroke is currently the leading cause of weather-related deaths in the U.S. (2019 Iowa Climate Statement). Additionally, "heat may degrade animal health due to physiological disturbances and a weakened immune system, making them more susceptible to infections and death... Further, heat stress slows animal weight gain so more energy and resources are required to offset production efficiency losses" (2019 Iowa Climate Statement). According to the National Climate Assessment, warming climates and changing rainfall distribution can affect the distribution of temperature-sensitive diseases in dairy cows, and can cause them to suffer from severe health issues like ketosis, mastitis, and lameness. A warmer climate can affect growing conditions for crops with a winter chilling requirement. A winter chilling requirement is a certain number of cumulative hours in which certain plants must be in a certain temperature range. If Iowa plants and animals are continually negatively affected by increasing temperatures and changing rainfall distribution, those working in the agricultural industry will also experience detrimental affects economically, which could affect all Iowa's entire population. With decreased crop yield, Iowa's economy may worsen, directly affecting Iowa citizens.

The Safe Drinking Water Foundation claims there are more than 1,000 pesticides currently in use, all of which have different toxicological effects. When combined, these pesticides have the potential to be deadly for humans and animals. The SDWF cites the Cornell University Cooperative Extension, who states, "[the] cleanup of groundwater contaminated by pesticides is usually impossible." Many Iowans depend on groundwater for wells used in the home and on the farm. The continued use of these toxic pesticides will permanently destroy a major water source and increasing rainfall could cause the continual spread and contamination of natural water sources. All Iowa citizens and agriculture would be affected as many people and animals could become sick from drinking contaminated water. In order to ensure a legacy and livelihood for future generations, Iowa needs to prioritize joining and being an active participant in the United States Climate Alliance.

# **Action Steps**

If officially supported by the Iowa Youth Congress, Iowa could join the United States Climate Alliance and pledge to follow the initiative of the USCA, which include "reducing super pollutants, mobilizing financing for climate projects, advancing a grid modernization using renewable energy, implementing appliance efficiency standards, building resilient communities and infrastructure, increasing carbon storage in landscapes, and deploying clean transportation" (United States Climate Alliance). In taking these extensive actions to attempt to reverse the adverse effects of climate change through the work of the United States Climate Alliance, Iowa's crop yield could improve and the risk of human and animal health concerns could be decreased. Other midwestern states such as Minnesota have worked as a member of the USCA to decrease the extreme flooding faced in some regions of the state. Other coastal states have attempted to face issues with rising sea levels through multiple legislative actions to improve the

environment. In joining the USCA, Iowa could focus on prevalent issues to help reverse and reduce the effects of climate change.

## Sources

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